

IN THE CLAIMS:

Claims 1 through 3, 11 through 18, and 21 through 24 have been amended herein. Claim 10 has been cancelled without prejudice or disclaimer. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

cl 1. (Presently Amended) A method of forming a semiconductor device, comprising:
providing a semiconductor substrate having an active surface including at least one layer of integrated circuitry thereon, said active surface defining a plurality of individual die locations thereon, and a plurality of bond pads associated with each of said plurality of individual die locations;
forming at least one intermediate conductive element ~~elements over~~ on at least one bond pad of
said plurality of bond pads ~~to project a height above said active surface;~~
forming a pattern of mutually transverse channels in said active surface to a depth below said at least one layer of integrated circuitry, said channels circumscribing a semiconductor element location comprised of at least one individual die and exposing peripheral edges of said at least one layer of integrated circuitry; and
~~applying an~~ forming a layer of encapsulant material ~~by transfer molding at least over~~
substantially all of said active surface and into said channels such that a surface of said
layer of encapsulant material has a pattern of depressions over said channels and a portion
of said at least one intermediate conductive element is exposed through and coplanar with
said surface of said layer of encapsulant material. ~~to a depth exceeding said height of~~
~~projection of said intermediate conductive elements; and~~
~~removing a depth of said encapsulant material sufficient to expose a portion of each of said~~
~~intermediate conductive elements.~~

2. (Presently Amended) The method of claim 1, further comprising forming at least one external conductive element ~~elements~~ over said exposed portion ~~portions~~ of said at least one intermediate conductive element ~~elements~~.

3. (Presently Amended) The method of claim 1, further comprising severing said semiconductor substrate ~~in alignment with at least some of~~ along said pattern of depressions over said channels into a plurality of semiconductor elements, each semiconductor element comprised of at least one individual die location, wherein said exposed peripheral edges of said at least one layer of integrated circuitry remain covered with said encapsulant material.

4. (Original) The method of claim 1, further comprising forming said channels with sloped side walls defining opposing chamfers.

5. (Canceled)

6. (Original) The method of claim 1, further comprising forming said channels with substantially parallel side walls.

7-10. (Canceled)

11. (Presently Amended) The method of claim 1, wherein forming said at least one intermediate conductive element ~~elements~~ is effected by forming at least one solder ball ~~balls~~.

12. (Presently Amended) The method of claim 1, wherein forming said at least one intermediate conductive element ~~elements~~ is effected by forming at least one pillar ~~pillars~~ of a conductive or conductor-filled epoxy or a metal-filled elastomer.

13. (Presently Amended) The method of claim 1, wherein forming said at least one intermediate conductive element ~~elements~~ is effected by a wire bonding capillary.

14. (Presently Amended) The method of claim 2, wherein forming said at least one external conductive element ~~elements~~ comprises forming at least one solder ball ~~balls~~.

15. (Presently Amended) The method of claim 2, wherein forming said at least one external conductive element ~~elements~~ comprises forming at least one pillar ~~pillars~~ of a conductive or conductor-filled epoxy.

16. (Presently Amended) The method of claim 2, wherein forming said at least one external conductive element ~~elements~~ comprises applying an anisotropically conductive film over said encapsulant material.

17. (Presently Amended) The method of claim 1, further comprising forming said layer of encapsulant material from a material selected from the group comprising filled polymers, epoxies, silicones, silicone-carbon resins, polyimides, polyurethanes and glasses.

18. (Presently Amended) The method of claim 1, further comprising forming another a layer of encapsulant material on a back side of said semiconductor substrate.

19-20. (Withdrawn)

21. (Presently Amended) The method according to claim 3, comprising:
placing at least one of said plurality of semiconductor elements with said at least one intermediate conductive element ~~elements~~ in alignment with at least one conductive bump ~~bumps~~ protruding from a carrier substrate; and
electrically connecting said at least one intermediate conductive element ~~elements~~ and said at least one conductive bump ~~bumps~~.

22. (Presently Amended) The method of claim 21, further including forming at least one bond pad pads over said the exposed portion portions of said at least one intermediate conductive element elements before electrically connecting said at least one intermediate conductive element elements to said at least one conductive bump bumps.

23. (Presently Amended) The method of claim 2, further comprising severing said semiconductor substrate ~~in alignment with at least some of~~ along said pattern of depressions over said channels into a plurality of semiconductor elements, each semiconductor element comprised of at least one individual die location, wherein said exposed peripheral edges of said at least one layer of integrated circuitry remain covered with said encapsulant material.

24. (Presently Amended) The method of claim 23, comprising:
placing at least one of said plurality of semiconductor elements with said at least one external conductive element elements in alignment with at least one terminal pad pads of a carrier substrate; and
electrically connecting said at least one external conductive element elements and said at least one terminal pad pads.

25-29. (Withdrawn)
